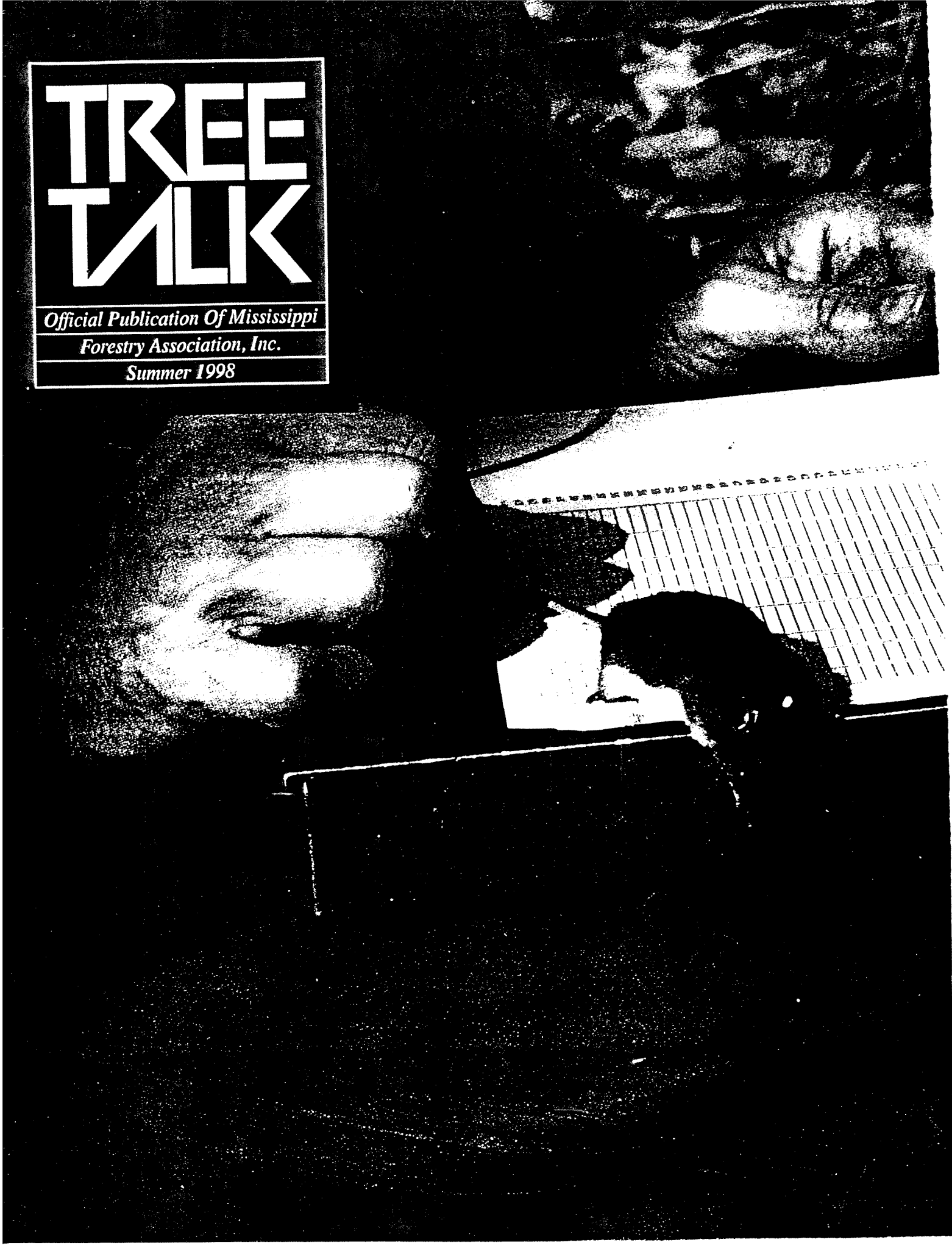


TREE TALK

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Bottomland Hardwood Research Center

Dr. John Stanturf, project leader for the Center for Bottomland Hardwood Research in Stoneville, Mississippi

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Research on bottomland hardwood started 60 years ago in Stoneville, Mississippi, when a Mississippi State University forester established some test plots. Two years later, in 1939, the U.S. Forest Service, Southern Experimental Station, joined with the University and started field studies managing hardwood stands and establishing cottonwood plantations. The Southern Hardwoods Laboratory was dedicated in 1962 by the late U.S. Senator John C. Stennis. The research program grew out of the need to assure a continuing supply of

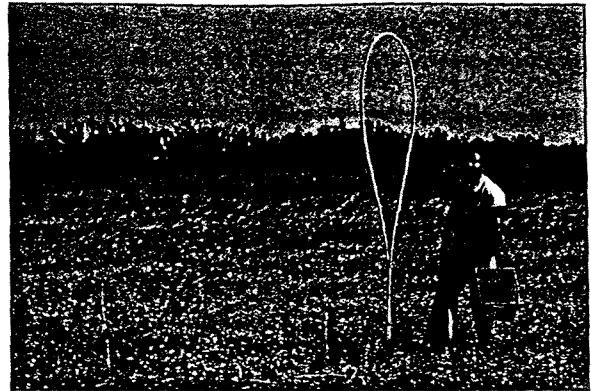
dedicated group of 16 scientists and more than 30 support staff who make up the Center for Bottomland Hardwoods Research.

First, the name change that really did not change. The Center for Bottomland Hardwoods Research of the Southern Research Station is the result of declining federal budgets for forestry research in the South. Two years ago, two separate research units in Stoneville (forest management and insect and disease research) were combined with a small seed biology unit in Starkville, the Forest Hydrology Lab in Oxford, and one scientist from the Institute for Quantitative Studies in New Orleans into the Center. The Southern Hardwoods Lab remains the name of the facility in Stoneville, while the Center describes the entire unit, including one scientist stationed in Pineville, Louisiana.

The mission of this group, the largest single Forest Service research unit in the South, is to provide the scientific basis for sustainable

management of southern bottomland hardwood and wetland forests and associated stream ecosystems.

Most important, however, has been the added capability and expertise of the additional scientists now focusing on bottomland hardwood forests. Center



A sampling reference point for studies of small mammals in restoration sites.

scientists can look at the forest at just about any appropriate scale from the molecular to the landscape; and not just the forest, but the associated aquatic system too. The easiest way to give a flavor for this capacity is to present the research by the four general problem areas.

In February of 1997, more than 100 people representing users of the Center's research met to help the staff to plan the research program for the next five years. This is part of the formal process that each Forest Service research unit goes through to develop a "strategic plan" for

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Center staff studies natural stands of bottomland woods.

hardwoods for products, wildlife habitat, recreation, flood control, and aesthetics. Most of the good management and protection practices used on millions of acres of southern bottomland hardwood forests can be traced back to research at the Southern Hardwoods Laboratory in Stoneville. But what is going on today? Lots of changes! The following quick scan can only give a partial view of all the work being done by the



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work. The response from people at the meeting, along with written comments received from others, were compiled into eight problem areas by staff. These problems were considered by Forest Service staff in the Southern Research Station and the Washington Office and distilled into four problem areas.

The problem areas broadly are: regeneration of bottomland hardwoods; stand management in bottomland hardwoods; relations between forest management and wildlife & fisheries; ecosystem processes and functions in forested wetlands.

Better information is needed on the regeneration of bottomland hardwood forests. This problem area encompasses continuing work on seed biology and natural regeneration, with a primary focus on our valuable oak species. Acorns have high moisture and fat content, which is why they are so

important for wildlife! But that makes them very difficult to store because they cannot be dried without damaging the embryonic oak tree. And we need a better understanding of what factors influence the production of seed, from flowering to fruiting. Other research in this area focuses on the problem we have obtaining enough large oak seedlings in the understory to insure a large component of oak in the next stand after harvesting, blowdown, or other disturbance. Finally, the scientists working in this problem area will continue to work on improving our ability to artificially regenerate bottomland hardwoods by planting seedlings or direct seeding.

Once a forest is established after harvesting a forest or on land converted from agriculture, we need to know how effectively to manage vigorous, healthy forests. Managers need information on the correct silvicultural systems to use, how to predict the way stands will



A Center staffer studies the Neotropical migrant cerulean warbler.

develop and what products and services we can expect from a given stand, and how to manage pest problems that might arise. Scientists at the Center working in this problem area will examine ways a manager might improve the stand for different objectives, including timber or wildlife habitat. They also will look for ways to detect, avoid, and treat insect or disease problems such as oak decline, insect borers, and a bacterial infection called wetwood.



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ife and fishery research is an
nt part of the Center's mission.
cular, staff is looking at the
and ecology of selected
ical migratory birds, warmwater
and freshwater mussels. The
ve of the wildlife research is to
stand existing bird communities
e bottomland hardwood forests
the breeding season and the
ion seasons, and the effects of
id ongoing forest management.
outh has the highest diversity of
water fishes in the United States,
e highest diversity of freshwater
ls in the world. These species are

mostly confined to
forested watersheds.
Center scientists seek
to understand better
how fish communities
respond to their
environment, to guide
land managers in
ways to conserve,
restore, or enhance
aquatic communities.
The mussel work
includes developing
better techniques to monitor population
trends. Without good trend informa-
tion, some of these sensitive mussels

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could become listed as federally endan-
gered species and disrupt land manage-

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Legislative Summary (continued from page 9)

er bills of interest to forestry

gh on this list has to be HB 1169,
ill to authorize a study by the
ssippi Dept. Of Wildlife, Fisheries
'arks to recommend a Natural &
c Waterways System. Some of
type laws in other states have
en to create land use prohibitions
regulations. Our concern was that
bill, as passed the House, made no
tion of limiting study recommenda-
to non-regulatory incentive
rams for landowner participation.
did it provide for any legislative
sight during the study process or
ortunity for input into the study by
eholders such as MFA members.
hout such assurances in the legisla-
, MFA felt that it would be a short
from our use of voluntary forestry
Management Practices (BMPs) to
slation mandating regulatory BMPs
streamside management zones that
ed what are called for in our current
grams.

When the bill passed over to the
ate, it was assigned to the Wildlife
l Fisheries Committee. Chairman
n Posey also sits on the Forestry
mmittee. Fortunately, Sen. Posey
e MFA and others the opportunity
talk to him about our concerns. His
nmittee completely replaced the
use language, and in doing so also
dressed the issues raised in the
ceding paragraph. The House
ncurred with the Senate version and

the bill was sent to the Governor.
Eighteen legislators have now been
selected to oversee the study that is
required by law to produce a report by
Dec. 31. MFA will be working to
provide our input into the study during
this period.

HB 768 passed the Legislature and in
doing so added new language to the
already controversial adverse possession
law. The new section states "*For claims
of adverse possession not matured as of July
1, 1998, the provisions of subsection (1)
shall not apply to a landowner upon whose
property a fence or driveway has been
built who files with the chancery clerk
within the ten years required by this
section a written notice that such fence or
driveway is built without the permission of
the landowner. Failure to file such notice
shall not create any inference that property
has been adversely possessed. The notice
shall be filed in the land records by the
chancery clerk and shall describe the
property where said fence or driveway is
constructed*".

Please don't call me asking what this
means because I really would have a
difficult time telling you.

The Legislature also passed a bill
introduced by Sen. Alan Nunnelee et al
that incrementally increases the amount
of the deduction from the gross estate of
a resident used to determine the value of
the taxable estate from \$600,000 to
\$1,000,000. This phase up will be
completed by the year 2006.

What happens now ?

I'm of the opinion that the days of
considering the Legislature a 90 day
issue are over. If you want your associa-
tion to maintain a proactive position on
legislative issues, it has become almost a
year-round job. As this issue of *Tree
Talk* is going to press, MFA has two
subcommittees and the Government
Affairs Committee working to develop
our position recommendations on
several issues prior to the July 10 MFA
Board of Directors meeting. These
include Natural & Scenic Waterways,
whether to try again on the Reforesta-
tion Tax Credit, energy deregulation,
and a possible move by MFA to update
the old 1944 seed tree law (the Forest
Harvesting Law). Starting July 1, several
legislative committees will hold meet-
ings to discuss issues of interest to MFA
and begin preparing legislation for
1999. MFA members have too much at
stake for us to sit on the sidelines. Five
years ago such year-round activity by
the Legislature was rare. Now it is
commonplace. This is not all bad. It
allows organizations like us to have
input into the process before the frantic
pace of the Session begins. But, it also
means that MFA must prepare earlier
and devote more time and resources
(staff and members) to the legislative
process if we are to continue to be
successful in the future.



Landowners will determine the timing and extent of thinning consistent with the maintenance agreement. All income generated from thinning will be retained by the LANDOWNER.

AT THE END OF 30 YEARS DOES THE OPENLAND TREE PLANTING COMPANY OWN THE TIMBER OR HAVE RIGHT OF FIRST REFUSAL?

NO! At the end of the 30-year period, landowners have fulfilled their obligation and are no longer bound by the maintenance agreement.

WHAT IF I WANT TO SELL THE LAND OR CHANGE LAND USE BEFORE THE 30-YEAR AGREEMENT EXPIRES?

If you sell the land and the new owner agrees in writing to honor the maintenance agreement, you do not have to repay the MPC-OTP cost-shares you received.

If you decide to sell the property and the new owner will not agree in writing to honor the maintenance agreement, or you decide to change land use, you must repay the MPC-OTP cost-shares you received plus eight percent interest.

HOW DO I APPLY FOR THE MPC-OTP?

Simply fill out an application form. In addition to name, address, etc., you will also need the Section, Township, and Range (S.T.R.) where your land is located; the Tax Assessor's I.D. number for your property; and a photocopy of your land deed which shows the courthouse deed book and page reference number. MPC's Real Estate department will assist you in acquiring this information, if necessary.

After you have completed the application and enclosed the copy of your deed, send it to MPC Real Estate Department, P. O. Box 4079, Gulfport, MS 39502-4079. You will be notified by mail if your application was approved or disapproved.

If you have questions regarding the MPC-OTP program, please contact the Jeffrey Thomas, Real Estate Department, Mississippi Power Company at (601) 865-5825.



environmental values. Research continues to establish baseline values for important processes within undisturbed forests, to understand the impact of harvesting and other activities better. Another area of research is developing methods to restore forests to land that was converted to agriculture but that floods too frequently to be cropped economically. Some estimates include as much as half a million acres in this category in the Delta. So the potential to restore is great. Needed information includes ways to restore sites that are difficult to plant using standard methods, and to plant stands of mixtures of species that are as successful as establishing plantations of a single species. Other research is needed to guide efforts to restore riparian and aquatic communities.

There is a lot going on at the Center for Bottomland Hardwoods Research! If you would like to know more about the program, contact John Stanturf, Project Leader, at (601) 686-3164. Each year, Center scientists present current research results at the meeting of the Southern Hardwood Forest Research Group in Stoneville. Usually held in mid-February, the meeting is open to all. If you would like to be placed on the mailing list for the meeting, contact Penny Byler, Project Secretary, at (601) 686-3154. The Center now has a home page on the Internet: (<http://www.srs.fs.fed.us/cbhr>). They can also be reached at P.O. Box 227, Stoneville, MS 38776.




Hardwood (continued from page 21)

ment activities. This is the only Forest Service research program devoted to the study of these organisms.

Underlying all these areas of research is the need to understand ecological processes and wetland functions better, the fourth area of research. Staff seeks to understand ecological processes better, such as how nutrients cycle between soil

and trees, how wood decomposes and serves as the substrate for beneficial microorganisms, and how flooding drives the system and makes these forests so productive. The long-term goal of this research is to develop environmentally-sound management practices that simultaneously produce commodities and maintain or improve



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